<u>REMARKS/ARGUMENTS</u>

Reexamination of the captioned application is respectfully requested.

A. SUMMARY OF THIS AMENDMENT

By the current amendment, Applicants basically:

1. Editorially amend the specification.

2. Cancel claims 25 and 26 without prejudice or disclaimer.

3. Editorially amend claims 2 – 4 and 9 – 24.

4. Add new dependent claim 27.

5. Thank the Examiner for the indication of allowable subject matter in claims 4-8, 12-16 and 20-24.

6. Respectfully traverse all prior art rejections.

7. Advise the Examiner of the simultaneous filing of a Petition to Extend.

8. Advise the Examiner of the simultaneous filing of an Information Disclosure Statement (IDS) [to request citation of certain references listed on page 1 of the specification].

B. PATENTABILITY OF THE CLAIMS

Claims 1-3, 9-11, 17-19, 25/1-3 and 26/1-3 stand rejected under 35 USC §103(a) as being unpatentable over U.S. Patent 7,420,943 to Narayanan et al in view of the P. Srisuresh reference [P. Srisuresh, "Middlebox Communications (MIDCOM) Architecture and framework", IETF RFC3303], hereafter denoted Middlebox NPL. All prior art rejections are respectfully traversed for at least the following reasons.

The specification relates to the handling of context of data packet flows. There is a need of a coordination mechanism for the transfer of context for flows that belong to the same session. One aspect of applicants' disclosure is to offer a coordination mechanism for the handling of context associated to flows that belong to the same session. The above-mentioned aspect is achieved by a context procedure, in which the

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total context for a session is divided into one common context and one dynamic context per IP flow. The common context is handled by a centralized control node, such as a Midcom Agent, and the dynamic context is handled by a middlebox associated to an access router. The context transfer procedures for the two types of contexts are coordinated so that an unambiguous session control is maintained.

Narayanan teaches two network structures, each comprising one access point and an associated access router. Narayanan describes a method to simply move all the context from one network structure to the other network structure during handover. The Narayanan mechanism works properly when handling single IP flows. Contrary to statements in the office action, Narayanan does not teach a method of handling context of more than one data packet flow, with the flows being simultaneous and belonging to the same session.

Drawbacks have been recognized concerning services and sessions wherein more than one flow is involved. For example, Multimedia sessions may involve of several parallel IP flows, one for voice, one for video, and one for whiteboard. After a hand-over between two access points, it is not unusual that IP flows belonging to the same session are distributed on different radio interfaces of a terminal. In such a situation, the flows of a session are distributed on two access routers after the hand-over and associated context transfer. The context transfer must then be performed in both access routers, since there is no master access router that can assume responsibility for the session context. This would lead to a context synchronization problem since the session context may have to be renegotiated during a session. For example, the bandwidth of the session may be renegotiated.

As Narayanan only treats a single data packet flow for each session, the above described problem is not discussed or solved. A person skilled in the art trying to find a solution to the above problem will not find a solution in the Middlebox NPL document,

since Middlebox NPL does not teach a method of handling context of more than one data packet flow, the flows being simultaneous and belonging to the same session.

The office action opines that Middlebox NPL teaches a method wherein an access point comprises an access router and a middlebox, which is controlled and supported by an associated Midcom Agent. However, the Applicant has not been able to locate such a teaching, and respectfully requests that the Examiner specifically identify such if this contention is continued in the next office action. Further, the Applicant has not been able to find where in Middlebox NPL a method is described which supposedly comprises:

- dividing the total context associated to a session into
common context, which is common to all flows of the
session, and one dynamic context per data packet flow of
the session;

- storing said common context in a Midcom Agent of a first
domain of the network structure;

- storing each dynamic context in a middlebox through
which the associated flow passes.

The office action makes reference to page 8, Fig.1 proxy server, and page 9, lines 5 and 6, stating the middlebox delegates application specific processing to the Midcom agent. However, the office action takes these lines out of the context of fig. 1 and pp. 8 and 9. Fig. 1 illustrates what is described on page 8 (section 3.0 Architectural framework for middleboxes): "There can be a variety of Midcom agents interfacing with the middlebox to communicate with one or more of the middlebox functions on an interface. As such, the middlebox communication protocol must allow for selective communication between a specific Midcom agent and one or more middlebox functions on the interface. The following diagram (fig.1) identifies a possible layering of the

service supported by a middlebox and a list of Midcom agents that might interact with it".

Further down on page 8 it is stated that "Application specific Midcom agents …. assist the middlebox in performing functions unique to the application and the middlebox service. For example, a Midcom agent, assisting a NAT middlebox, might perform payload translations, whereas a Midcom agent assisting a firewall middlebox might request the firewall to permit access to application specific, dynamically generated, session traffic." The above referenced parts of the text constitute the context for the cited lines 5-6 on page 9. These lines constitute only a part of a whole sentence that is read "The Midcom protocol between a Midcom agent and a middlebox allows the Midcom agent to invoke services of the middlebox and allow the middlebox to delegate application specific processing to the Midcom agent."

Thus, Middlebox NPL teaches a structure wherein a middlebox is associated with a number of application specific Midcom agents to which it may delegate application specific processing . However, Applicants' independent claims state that " …, of which terminals at least one is mobile and may change access between different access points of said network structure, wherein an access point comprises an access router and a middlebox, which is <u>controlled</u> and supported by an associated Midcom Agent belonging to a domain of said network structure, ..".

Thus, the network structure of the independent claims comprises different access points, each comprising a middlebox that is controlled and supported by one controlling and supporting Midcom agent belonging to a domain of the said network structure. Such a structure is not suggested by the middlebox NPL document. On the contrary, Middlebox NPL suggests a middlebox is associated with a number of application specific Midcom agents to which it may delegate application specific processing. The network structure of Applicants' independent claims is neither suggested by Narayanan.

Further, a method comprising the steps of the independent claim 1 is not suggested by Narayanan or middlebox NPL.

Moreover, a combination of Narayanan and middlebox NPL would not realize the subject matter of applicants' independent claims 1, 9 and 17.

C. **MISCELLANEOUS**

In view of the foregoing and other considerations, all claims are deemed in condition for allowance. A formal indication of allowability is earnestly requested.

The Commissioner is authorized to charge the undersigned's deposit account #14-1140 in whatever amount is necessary for entry of these papers and the continued pendency of the captioned application.

Should the Examiner feel that an interview with the undersigned would facilitate allowance of this application, the Examiner is encouraged to contact the undersigned.

Respectfully submitted,

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